WHAT IS CLAIMED IS:

1.   A data-recording apparatus that records video images comprising a plurality of still images, onto a recording medium and comprising:

a maximum-data-amount-detection device for detecting the maximum amount of data of a still image for special reproduction among a plurality of still images; and

a recording device for recording said detected maximum amount of data onto said recording medium on which said video images are recorded.

2.   The data-recording apparatus according to claim 1, wherein

said video images are video images that have been compressed according to the MPEG2 (Motion Picture Experts Group 2) method; and wherein

said still images for special reproduction are the I (Intra-coded) pictures in said MPEG2 method.

3.   A data-reproduction apparatus that reproduces said video images that are recorded on said recording medium by the data-recording apparatus according to claim 1, and converts them into special reproduction images for said special reproduction and comprising:

a reproduction device for reproducing said video images from said recording medium;

a detection device for detecting said recorded maximum data amount from said recording medium;

a setting device for setting conversion specification based on

said detected maximum data amount when converting said video images to said special-reproduction images; and

a conversion device for converting said reproduced video images to said special-reproduction images based on said set conversion specification.

4.   The data-reproduction apparatus according to claim 3, wherein said conversion specification is memory capacity of a temporary memory device for temporarily storing video images when converting said video images to said special-reproduction images, and the temporary memory device is secured inside a memory device of said data-reproduction apparatus.

5.   The data-reproduction apparatus of claim 3, wherein said conversion specification is the bandwidth used when outputting said special-reproduction images to the outside after conversion.

6.   A data-recording method for recording video images comprising a plurality of still images, onto a recording medium and comprising:

a maximum-data-amount-detection process for detecting the maximum amount of data of a still image for special reproduction among a plurality of still images; and

a recording process for recording said detected maximum amount of data onto said recording medium on which said video images are recorded.

7.   A data-reproduction method for reproducing said video images that are recorded on said recording medium by the data-recording method according to claim 6, and converts them into special-reproduction images for said special reproduction and

comprising:

a reproduction process for reproducing said video images from said recording medium;

a detection process for detecting said recorded maximum data amount from said recording medium;

a setting process for setting conversion specification based on said detected maximum data amount when converting said video images to said special-reproduction images; and

a conversion process for converting said reproduced video images to said special-reproduction images based on said set conversion specification.

8. A computer data signal embodied in a carrier wave and representing a sequence of instructions, which executed by a recording computer included in a data-recording apparatus, which records video images comprising a plurality of still images onto a recording medium, the instructions cause the recording computer to function as:

a maximum-data-amount-detection device for detecting the maximum amount of data of a still image for special reproduction among a plurality of still images; and

a recording device for recording said detected maximum amount of data onto said recording medium on which said video images are recorded.

9. A computer data signal embodied in a carrier wave and representing a sequence of instructions, which executed by a reproduction computer included in a data-reproduction apparatus, which reproduces said video images that are recorded on said recording medium by a data-recording apparatus according to claim 1

and converts them into special reproduction images for said special reproduction, the instructions cause the computer to function as:

a reproduction device for reproducing said video images from said recording medium;

a detection device for detecting said recorded maximum data amount from said recording medium;

a setting device for setting conversion specification based on said detected maximum data amount when converting said video images to said special-reproduction images; and

a conversion device for converting said reproduced video images to said special-reproduction images based on said set conversion specification.

10.   A data-recording medium in which a program for recording data is recorded so as to be readable by a recording computer included in a data-recording apparatus according to claim 1, wherein said program allows said recording computer to function as:

a maximum-data-amount-detection device for detecting the maximum amount of data of a still image for special reproduction among a plurality of still images; and

a recording device for recording said detected maximum amount of data onto said recording medium on which said video images are recorded.

11.   A data-recording medium in which a program for reproducing data is recorded so as to be readable by a reproduction computer included in said data-reproduction apparatus according to claim 3, wherein said program allows said reproduction computer to function as:

a reproduction device for reproducing said video images from said recording medium;

a detection device for detecting said recorded maximum data amount from said recording medium;

a setting device for setting conversion specification based on said detected maximum data amount when converting said video images to said special-reproduction images; and

a conversion device for converting said reproduced video images to said special-reproduction images based on said set conversion specification.

12. A recording medium comprising:

a video-image-recording area in which video images comprising a plurality of still images are recorded; and

a maximum-data-amount-recording area in which the maximum amount of data of a still image for special reproduction among a plurality of still images is recorded.

13. The recording medium according to claim 12, wherein

said video images are video images that have been compressed according to the MPEG2 method; and wherein

said still images for special reproduction are the I pictures in said MPEG2 method.